

WHAT IS CLAIMED IS:

1. A roller arrangement for embossing a web-shaped material, comprising:
 - at least one embossing roller defining an embossing pattern, wherein the embossing pattern comprises a plurality of elevations aligned in rows that are spaced apart in a circumferential direction; and
 - a cleaning roller defining a plurality of cleaning elements that are aligned between the rows of the at least one embossing roller.
2. The roller arrangement of claim 1, wherein the at least one embossing roller comprises a punch.
3. The roller arrangement of claim 1, wherein the at least one embossing roller comprises a matrix.
4. A roller arrangement for embossing a web-shaped material, comprising:
 - a punch defining a first embossing pattern, wherein the first embossing pattern comprises a first plurality of elevations aligned in rows that are spaced apart in a circumferential direction;
 - a matrix defining a second embossing pattern, wherein the second embossing pattern comprises a second plurality of elevations aligned in rows that are spaced apart in a circumferential direction; and
 - a cleaning roller defining a plurality of cleaning elements that are aligned between the rows of one of the punch and the matrix.

5. The roller arrangement of claim 4, wherein the plurality of elevations of the first embossing pattern is configured to align with free spaces between the plurality of elevations of the second embossing pattern.

6. The roller arrangement of claim 4, wherein the cleaning elements are aligned in a circumferential direction of the cleaning roller.

7. The roller arrangement of claim 4, wherein the cleaning elements interact with the one of the punch and the matrix in between the rows of elevations of the one of the punch and the matrix to remove sediment.

8. The roller arrangement of claim 4, wherein the cleaning elements are spaced apart in the circumferential direction of the cleaning roller.

9. The roller arrangement of claim 8, wherein the cleaning elements are radially offset in the axial direction of the cleaning roller.

10. The roller arrangement of claim 4, wherein the plurality of elevations of at least one of the first and second embossing patterns of the punch and matrix is arranged in a checker board pattern.

11. The roller arrangement of claim 4, wherein the web-shaped material is tissue material.

12. The roller arrangement of claim 4, wherein the web-shaped material is paper.

13. The roller arrangement of claim 4, wherein one of the first embossing pattern and the second embossing pattern is cross-shaped.

14. The roller arrangement of claim 4, wherein one of the first embossing pattern and the second embossing pattern is square-shaped.

15. The roller arrangement of claim 4, wherein one of the first embossing pattern and the second embossing pattern is oval-shaped.

16. A method for embossing web-shaped material comprising:

rolling the web-shaped material over an embossing roller, the embossing roller
defining a plurality of elevations in rows that are spaced apart in a circumferential
direction;
positioning a cleaning roller adjacent to the embossing roller, the cleaning roller
defining a plurality of cleaning elements that are aligned between the rows of the
embossing roller; and
running the plurality of cleaning elements in between the rows of the embossing
roller to remove sediment.

17. The method of claim 16, further comprising running the plurality of cleaning elements intermittently in between the rows of the embossing roller to remove sediment.

18. The method of claim 16, further comprising arranging the plurality of cleaning elements radially offset on the cleaning roller such that only one cleaning element at any one time runs between the rows of the embossing roller.

19. The method of claim 16, further comprising running the plurality of cleaning elements successively between the rows of the embossing roller.

20. The method of claim 16, wherein the embossing roller comprises one of a punch and a matrix.